

Letter from the Supervisor

The sight of monarch caterpillars, to me, are a sure sign that fall is almost here. Each year we are lucky to rear a few of these beautiful creatures feeding them from our seemingly endless supplies of milkweed leaves and then releasing them back into the ecosystem to start their migration south. Visitors enjoy seeing the life cycle and metamorphosis first hand and staff love this small act of butterfly conservation. It's a great opportunity to observe one of the most fascinating changes in nature and a wonderful way to support pollinators and local wildlife.

Caterpillars aren't the only thing changing around CCNC! You may have noticed that we are using a new online registration system for all program registrations. The

new system was officially launched on August 1, 2017 and replaces Rock Enroll. If you haven't made a new account yet you'll need to do so. You can do it online at www. rockvillemd.gov/registration and you will immediately be able to register for any class in the City of Rockville. Or stop by the Nature Center and we'll help you make an account in person.

Mark the changing season by joining our Fall Night Hike on October 14, 2017 from 7-8 p.m. Naturalists will lead a short hike through the forest preserve and end the evening with a round of s'mores by the campfire. Little ones interested in learning about the changes in nature are invited to register for our Little Acorns series that meets every other

Thursday. It's a great way for toddlers to learn to socialize through nature play and other seasonally appropriate activities.

One other great change that you'll notice at CCNC this fall is our new outdoor nature play equipment! We are adding some musical elements for visitors to explore so be sure to stop by in October and see what's new.

We can't wait to see you this fall at Croydon Creek Nature Center!

Best regards,

Elissa Totin

Croydon Creek Nature Center

852 Avery Road, Rockville, MD 2085 I

Phone

240-314-8770

Web address

www.rockvillemd.gov/croydoncreek

Email

ccnc@rockvillemd.gov

Hours of Operation

Tuesday through Saturday, 9 a.m.-5 p.m. Sunday, I-5 p.m.

Closed Mondays

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Kids Corner

Air Dried Clay Leaves

Air Dry Clay

Foil

Rolling pin

Plastic Knife or bamboo skewer

Leaves

Paint

Collect leaves and gather supplies. Try to choose leaves that aren't too delicate and have an interesting texture.

Air dry clay can be found at local craft stores.

- Place clay on foil and roll flat to a thickness of about 4 millimeters.
- **2.** Firmly, press leaf onto clay. Lightly roll over the leaf with a rolling pin.
- **3.** Cut around edges using a knife or bamboo skewer and remove excess clay.
- 4. Carefully remove leaf from clay and let dry up to 24 hours.

Paint your new leaf and enjoy! It makes a good tray for trinkets, keys or rings.

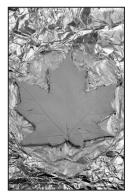
Adapted from https://craftinvaders.co.uk/air-dried-clay-leaves/











4.

Party on the Wild Side at Croydon Creek Nature Center

Birthday Party Themes

Classic Party (ages 3+; all year)

Classic With Craft (ages 3+; all year)

Feathers and Fur (ages 3+; all year)

Tracks and Trails (ages 3+; all year)

Meadow Mayhem (ages 4 +; June-Sept)

Creek Crawl (ages 7 +; June-Sept)

Geocaching Adventure (ages 8+; all year)

Croydon Creek nature parties are designed to educate and entertain with hands-on programs that highlight the wonders of nature. The Nature Center's staff will make sure you and your child have a memorable birthday experience, whether you are interacting with the much-loved reptiles and amphibians who live at the center, exploring the trails on a geocaching adventure, or enjoying a naturalist-led hike in the surrounding woods.

Party Planning Details

Birthday parties at Croydon Creek feature a fun-filled hour-long program led by a naturalist and are best suited for children ages 3 and older, with some parties designed for older children. The birthday child receives one Wild Party T-shirt and each party guest receives a special nature craft to take home.

Scheduling a Party

Choose from the following times:

Saturdays: 10:30 a.m.-1 p.m. or 2-4:30 p.m., Sundays: 2-4:30 p.m.

Parties are scheduled year-round. Call Croydon Creek Nature Center at 240-314-8770 for more information and date availability.

Party Fees

Fee (up to 10 children): \$180/Rockville resident; \$204/ non-Rockville resident. Add \$10 for each additional child, up to a maximum of 25 children. A \$50 non-refundable deposit is required to reserve the date. Deposits can be paid using either MasterCard or VISA, check or cash.

Climate Change & Ecosystems

An ecosystem is a community of organisms in a given area. In an ecosystem, the living organisms are interacting with each other and they are also interacting with the nonliving things such as sun, water, soil and air. Ecosystems can be something as small as a puddle of water in your backyard to something as large as the Chesapeake Bay. Ecosystems often overlap and they combine to form the Earth's biosphere. If we zero in on even a small ecosystem, we can see there is very complex work being done there. Energy is flowing constantly through the system and recycling of nitrogen and carbon dioxide is taking place. Each member of the ecosystem "team" has an important role to play and just like a sports team, each one relies upon the other for success. All life on Earth, including human life, depends on the functioning of ecosystems, so when they are disrupted by changes it can be disastrous and have far-reaching effects.

There are many factors that can cause disruption within an ecosystem. Sometimes these disruptions occur naturally, like a tree that falls in the forest, or when a creek, ever-running, slowly erodes its banks and changes its path. These things are beyond our control, but many factors causing disruption in ecosystems can be tracked back to human causes. Maybe we cut down trees to build a new road or we fill in a wetland to make space for more houses. When these systems face this kind of quick and permanent change, they often can't recover. This means that slowly, but surely, we are changing the planet.

Although something like cutting down a forest or filling in a wetland is a more obvious disrupter, another huge factor is working against our current ecosystems, and that is the climate. It is changing at a faster rate than it has ever before in the history of our planet and

the signs of it disrupting ecosystems are all around us, if we look hard enough.

Something I think we can all relate to is spring seeming to come earlier and earlier each year. Here in the Washington area, the cherry blossoms are a very good measure of when spring has sprung. Because of their popularity, it is easy to find records of exact dates of peak blooms going back for decades. In 2017, we had a very mild winter, so by late February the cherry blossoms were getting ready to bloom. In fact, it was on track to be the earliest bloom on record. Then an arctic blast hit, causing damage to an estimated 50 percent of the blossoms. In the end, the blooms reached their peak on March 25, still ahead of the average peak bloom date of April 1.

The cherry blossoms are not the only thing that are being affected by the earlier spring. Many living things base important factors in their annual life cycles on climate. Activities such as migration, blooming and reproduction are triggered, in part, by climate. According to research found on the Environmental Protection Agency's website, due to earlier springs, migratory birds are nesting earlier on the East Coast, some northeastern birds are returning from their winter grounds as much as 13 days earlier than in the last century and, in California, 16 out of 23 butterfly species have shifted their migration, arriving back earlier than ever recorded.

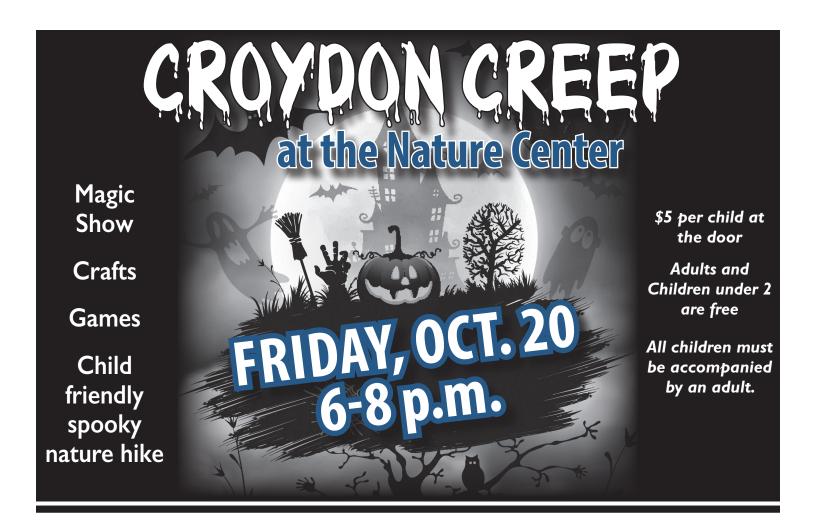
Migrations aren't the only thing that are changing. The ranges in which many animals and plants are found are shifting, too. In North America, ranges are shifting northward or to higher elevations to escape the increasing temperatures in both terrestrial and aquatic environments. According to studies conducted in 2014, the median rate of range change on land is an increase of 36 feet in elevation and

10.5 miles northward per decade. For some species, this means moving into areas that are harder to live in or have more competition, making it harder to survive. For other species that are already either living on the top of a mountain or very far north, this is an impossible situation. This movement is leading to local extinctions of plants and animals in many areas.

All species are facing these range shifts, including disease vectors such as mosquitos, ticks and flies. Along with range shifts, increased heat and humidity, longer warm seasons and an increase in the occurrence of flooding has brought more of these vectors closer to humans in North America than ever before. Incidences of diseases such as West Nile, Zika and Lyme disease are increasing and occurring in areas that have rarely seen vectorborn diseases in the past. In the U.S. alone, the amount of people who have contracted Lyme disease has doubled since 1991.

Climate change is affecting life on Earth in many ways. Our ecosystems are changing and shifting as the climate does. Although it seems overwhelming, there are things that we can do to help these changes slow. Consider planting native plants and trees in your yard to increase habitat for our animals and add to our local ecosystem, or go for a walk and take a trash bag with you to pick up litter as you go. Some very simple things can make a big difference. Remember that every little bit helps.





Croydon Creek Nature Center

852 Avery Road Rockville, MD 2085 I 240-314-8770 www.rockvillemd.gov/croydoncreek





Fall Programs

Croydon Creek Campfire (Adult/Child)

Gather around the campfire with your friends for stories, snacks and more. An adult must accompany children and all participants must register.

Fall Night Hike

Enjoy a naturalist led hike through the forest preserve and s'mores by the campfire.

Age: 5+

1202 Sa 10/14 7-8 PM \$5/\$6

Creepy Crawlies

Learn about things we find creeping and crawling in the forest and enjoy a s'more by the fire.

Age: 3+

1203 Sa 11/4 5:30-6:30 PM \$5/\$6

Little Acorns

Explore nature with your little ones through a variety of play-based activities. Time will be spent outdoors weather permitting. Adult participation required. Spaces are limited. Advanced registration recommended.

Age: 18-36 mo

Camouflage

1185	Th	9/21	10-11 AM	\$8/\$10
Reptil	l es Th	10/5	10-11 AM	\$8/\$10
Under		Feet 10/19	10-11 AM	\$8/\$10
All Al 1192	_	all 11/2	10-11 AM	\$8/\$10
Squiri		11/16	10-11 AM	\$8/\$10

Garden Volunteers Needed!

We are looking for volunteers to help tend our native plant gardens. Work is mostly done in the growing season. If you are interested, contact the Nature Center supervisor at etotin@rockvillemd.gov to get more information.

Webelos Adventure Programs















INTO THE WOODS

Sun., Oct. I

INTO THE WILD

Sun., Nov. 5 2-4 p.m.

Naturalists will help you complete all of the necessary requirements.

All materials provided; however, pins are not supplied by the Nature Center. Programs held rain or shine. Dress for the weather.

Cost: \$14 residents; \$16 nonresidents For additional information or to register, call Melinda Norton at 240-314-8771 or email mnorton@rockvillemd.gov.

Price key: Resident Discount/Non Resident Rate

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Fall Programs



Nature Tots (Adult/Child)

Discover the wonders of nature with your child. Each session, a naturalist helps you delve into a different nature topic through nature play, crafts, stories and hikes. Dress for the weather. Adult participation required. Spaces are limited.

Age: 2-5

Flying Friends

1028	Sa	9/23	10-11:30 AM	\$8/\$10
Fores	t Adv	enture		
1045	Sa	10/28	10-11:30 AM	\$8/\$10
Color	s of N	lature		
1046	Sa	11/18	10-11:30 AM	\$8/\$10
Natu	re Ser	nses		
1143	Sa	12/16	10-11:30 AM	\$8/\$10

Like us on Facebook



Croydon Creek Nature Center



To register visit www.rockvillemd.gov/guide

Outdoor Science Club

Young scientists investigate a variety of science topics through hands-on activities and time spent exploring the forest preserve.

Age: 6-8

Pollinators

From bees to birds to butterflies, learn about the animals who pollinate plants.

1151 Su 9/24

1:30-3 PM

\$8/\$10

Mushrooms, Moss & Lichens

Take a look at the forest floor to discover plants and fungus who live there.

1154 Su

10/22

1:30-3 PM

\$8/\$10

Nocturnal Animals

What goes bump in the night? Explore animals who are active while we are asleep.

1158 Su

11/19

1:30-3 PM

\$8/\$10

Saturday Story and Hike

Help us collect non-perishable food items for Rockville's Holiday Drive while you enjoy storytime and a naturalist-led hike. Participants are asked to bring I non-perishable food item per person which will be donated to the City's annual food drive.

Age: 2-5

2107

11/11

10-11 AM

Free

Natural Holiday Crafts (Adult/Child)

Sa

Spend the afternoon using a variety of natural or recycled objects to make holiday crafts and ornaments. Each participant will complete at least three projects. Adult participation required for children under 8. Register by Nov. 28.

Age: 6-12

2087 Su 12/3

2-3:30 PM

\$10/\$13



Going Paperless

The Croydon chronicle is going paperless in the spring of 2018. Don't miss out! Send your email address to ccnc@rockvillemd.gov to be added to our email list and we'll send you each edition directly to your inbox.